REMARKS

Summary Of The Office Action & Formalities

Status of Claims

Claims 1-18 are all the claims pending in the application. By this Amendment, Applicant is amending claims 1-2, 5, 10-11 and 15. No new matter is added.

Information Disclosure Statement

Applicant also thanks the Examiner for initialing the references listed on form PTO/SB/08 submitted with the Information Disclosure Statement filed on February 28, 2007.

Drawings

Again, Applicant thanks the Examiner for acknowledging and accepting the drawings filed on April 6, 2007.

Claim Objections

Claims 5, 10, 11, and 15 are objected to because of the following informalities:

> Regarding claim 5, "screw hole" in line 4 should be --through hole--; regarding claim 10, "rotates" should be --is rotatable--;
>
> regarding claim 11, --a-- should be inserted before "hole" in line 6;
>
> regarding claim 15, "screw hole" in line 3 should be --through hole--. Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

Applicant has amended claims 5, 10, 11 and 15 as suggested by the Examiner, to overcome the objection.

Claim Rejections - § 112

Claims 1-9 and 11-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, regarding claim 1, the Examiner states:

> Regarding claim 1, there is an inconsistency between the language in the preamble and a certain portion in the body of the claim, thereby making the scope of the claims unclear. The preamble clearly indicated that the fastener system is "for fastening a vacuum pump (1) to a wall (2) of a stationary structure (3)". However, the body of the claim positively recites "the wall of the stationary structure", e.g., "tapped holes provided in the wall of the stationary structure". Accordingly, is the combination or subcombination being claimed? Appropriate correction, clarification, or both is required. For purposes of this Office action, the examiner has considered the wall of the stationary structure as being part of the fastener system as a combination.
>
> Further, the limitation "coaxial" in line 3 is a relative term, which renders the claim indefinite. In other words, relative to what is the annular flange coaxial to now that the flange is being positively claimed.

Office Action at page 3. Applicant respectfully disagrees. Claim 1 clearly recites a fastening system, which can include coaxial flanges and through holes without requiring the wall or the stationary structure to be an element of the claim. Nevertheless, Applicant is amending claim 1 for clarity and as a path of least resistance.

Regarding claim 2, the Examiner states:

> Regarding claim 2, it is unclear what shape is required in lines 2-4, other than being cylindrical as recited in claim 1, lines 9-10, to allow the proximal segment during "bending of the screw

> shank until the screw shank comes into abutment against the side wall of the proximal segment of the through hole".

Office Action at pages 3-4. Applicant respectfully disagrees. It is not necessary for the claim to recite only one particular shape. Rather, it is permissible to restrict the shape in terms of functional requirements as set forth in claim 2. Nevertheless, Applicant is amending claim 2 for clarity and as a path of least resistance.

Regarding claim 11, the Examiner states:

> Regarding claim 11, the recitation "an opening of an outermost opening of the hole" in lines 14-15 is misdescriptive and/or inaccurate since an outermost opening, which is already an opening, cannot have another opening. This limitation is indicating that the opening of the hole has another opening.

Office Action at page 4. Applicant has amended claim 11 to overcome the rejection.

> Regarding claim 12, the recitation "an outermost opening" in line 2 makes unclear whether this is another outermost opening of the hole than that recited in claim 11, line 14,

Office Action at page 4. Applicant has amended claim 12 to overcome the rejection.

> Regarding claims 3-9 and 18, the claims depend from claim 1 and therefore are indefinite. Regarding claims 13-18, the claims depend from claim 11 and therefore are indefinite.

The rejection under 35 U.S.C. § 112 of claims 3-9 and 18 is addressed in connection with claim 1 above. The rejection under 35 U.S.C. § 112 of claims 13-18 is addressed in connection with claim 11 above.

Art Rejections

1. Claims 1, 2, 11-14 and 18 are rejected under 35 U.S.C. § 102(b) as being anticipated by Potts, (US 2,748,578).

2. Claims 1, 2, 5-7 and 9-18 are rejected under 35 U.S.C. § 102(e) as being anticipated by Okudera et al., (US 6,824,349).

3. Claims 5, 6 and 15-17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Potts (US 2,748,578) in view of Allart et al. (US 5,220,854).

4. Claim 8 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Okudera et al. (US 6,824,349).

5. Claims 1, 3, 4, 9 and 11-17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Carlson (US 2,560,413) in view of Weis (US 1,831,430).

Applicant respectfully traverses.

Claim Rejections - 35 U.S.C. § 102

1. Claims 1, 2, 11-14 and 18 In View Of Potts, (US 2,748,578).

In rejecting claims 1, 2, 11-14 and 18 in view of Potts, (US 2,748,578), the grounds of rejection state:

> Regarding claim 1, Potts discloses, in Figure 1, a fastener system comprising a coaxial annular flange **16**, tapped holes **A1** (see marked-up attachment), through holes **A2**, and screws **32**. The tapped holes **A1** are provided in a wall of a stationary structure **30**. The through holes **A2** are provided in the flange **16**. The screws **32** have heads fitted so that their shanks pass through the through holes **A2** and are screwed into the tapped holes **A1**. Each of the through holes **A2** comprises a distal segment **A3** followed by an enlarged proximal segment **A4**. The distal segment **A3** is cylindrical and the enlarged proximal segment **A4** is cylindrical

about the same axis and is adjacent to a corresponding one of the tapped holes **A1**.

Regarding claim 2, the proximal segment **A4** of the through hole has a shape. A maximum lateral offset between the through hole and the corresponding tapped hole is greater than the radius of the screw shank. The proximal segment **A4** is of a length greater than the length of the distal segment **A3**.

Regarding claim 11, Potts discloses, in Figures 1 and 4, a faster system comprising a screw **32**, a flange **16**, and a stationary structure **30**. The screw comprises a head and a shank. The flange **16** comprises a through hole **A2**. The through hole **A2** comprises a distal segment **A3**, and a proximal segment **A4**. The stationary structure **30** has a hole **A1**. A cross-sectional area of the distal segment **A3** taken in a direction perpendicular to a central axis of the through hole **A2** is smaller than that of the proximal segment **A4**. The proximal segment **A4** provides a gap (when the shank is being inserted). The proximal segment **A4** has an opening sized differently from an outermost opening of the hole **A1** in the stationary structure **30**.

Regarding claim 12, the proximal segment **A4** has an opening greater than the outermost opening of the hole **A1**.

Regarding claim 13, a distance measured in a radial direction of the though hole **A2** between an inside wall of the proximal segment **A4** and an opposing outside surface of the screw shank when the screw is fully inserted in the through hole **A2** is greater than a radius of the screw shank. Applicants should note that this claim does not indicate that the screw has to be sitting or abutting. Merely inserting the shank without being inserted in the hole in the stationary structure anticipates the subject matter because the shank in the through hole is considered to be "fully inserted" during insertion.

Regarding claim 14, the proximal segment **A4** has a length greater than a total length of the distal segment **A3**.

Regarding claim 18, each of the proximal segments **A4** has an opening greater than an outermost opening of the tapped holes **A1**.

Office Action at pages 5-7. Applicant respectfully disagrees.

Claim 1 recites, *inter alia*, "a distal segment (16a) that is cylindrical followed by an enlarged proximal segment (16b) that is cylindrical about the same axis and that is adjacent to the corresponding tapped hole when fastened to the stationary structure..."

Referring to Figure 1 of Potts and the Examiner's marked-up attachment thereof submitted with the outstanding Office Action, the Examiner alleges that the portion labeled A3 corresponds to the claimed distal segment of the claimed through hole, and the portion labeled A4 corresponds to the claimed proximal segment of the claimed through hole. *See* Office Action at page 5. However, the Examiner's interpretation ignores the claimed feature that the proximal segment is adjacent to the corresponding tapped hole when fastened to the stationary structure. When the flange is attached to the stationary structure, the portion labeled A3, which allegedly corresponds to the claimed distal segment is adjacent to the portion labeled A1, which the Examiner alleges corresponds to the tapped hole. In other words, under the Examiner's interpretation of Potts, the distal segment is adjacent to the tapped hole, as opposed to the proximal segment being adjacent to the tapped hole.

Regarding claim 2, the grounds of the rejection do not address all the limitations of this claim. For example, claim 2 recites, *inter alia*, "the proximal segment (16b) of the through hole (16), during bending of the screw shank (19) until the screw shank comes into abutment against the side wall (16c) of the proximal segment (16b) of the through hole (16), allows a maximum lateral offset (D) between the through hole (16) and the corresponding tapped hole that is greater than the radius of the screw shank (19); and the proximal segment (16b) of the through hole (16)

is of a length (Lb) greater than the length (La) of the distal segment (16a) of the through hole (16)."

According to the Examiner's interpretation of Potts, the screw shank is disposed in the alleged distal segment A3 and the alleged tapped hole A1, while the screw head is disposed in the alleged proximal segment A4. *See* marked-up attachment of Figure 1 of Potts. Assuming *arguendo*, that the screw shank of Potts is able to bend, if the screw shank were to bend, the screw shank would not come into abutment against the side wall of the proximal segment, as claimed, but would rather come into abutment against the side wall of the alleged distal segment A3, since the screw shank is not disposed in the proximal segment.

In addition, the Examiner contends that Potts teaches a maximum lateral offset between the through hole and the corresponding tapped hole is greater than the radius of the screw shank, however the Examiner has not provided any support for this assertion. Moreover, Potts teaches that upon excessive torque load being placed upon the driven shaft 12, the shear pins 33 will break to disconnect the motor from the load, whereby the shaft 10 and sleeve 30 will be permitted to rotate freely relative to the driven shaft 12. *See* Potts at col. 3, lines 53-58. In other words, upon an excessive torque load exerted on the drive shaft 12, the shear pins 33 break in response to the torque as opposed to the through hole being laterally offset relative to the corresponding tapped hole, much less that the maximum lateral offset is greater than the radius of the screw shank.

Regarding claim 11, the grounds of the rejection do not address all the limitations of this claim. For example, claim 11 recites, *inter alia*, "when the screw is inserted into the through

hole with the proximal segment closest to the stationary structure relative to the distal segment and secured to the stationary structure, the proximal segment provides a gap in which the shank can bend while maintaining the vacuum pump fastened to the stationary structure." Based upon the Examiner's interpretation of Potts discussed above, the alleged proximal segment A4 is not closest to the stationary structure relative to the alleged distal segment A3. Rather, the alleged distal segment A3 is closest to the stationary structure. Furthermore, the alleged proximal segment A4 of Potts does not provide a gap in which the shank can bend while maintaining the vacuum pump fastened to the stationary structure, as claimed in claim 11. As shown in the Examiner's marked-up version of Figure 1 of Potts, the screw shank is disposed in the alleged distal segment A3 and the alleged tapped hole A1. Any gap in which the shank could bend would be provided by either the alleged tapped hole A1 or the alleged distal segment A3.

Regarding claims 12-14, Applicant submits that since such claims are dependent upon claim 11, such claims are patentable at least by virtue of its dependency.

Regarding claim 18, Applicant submits that since claim 18 is dependent upon claim 1, it is patentable at least by virtue of its dependency.

In view of at least the foregoing reasons, the Examiner is kindly requested to reconsider and withdraw the rejection of claims 1, 2, 11-14 and 18 in view of Potts.

2. Claims 1, 2, 5-7 And 9-18 In View Of Okudera et al., (US 6,824,349).

In rejecting claims 1, 2, 5-7 and 9-18 in view of Okudera et al., (US 6,824,349), the grounds of rejection state:

> Regarding claim 1, Okudera et al. disclose, in Figure 4, a fastener system comprising a coaxial annular flange **1a**, tapped

holes **14a**, through holes **30**, and screws **15**. The tapped holes **14a** are provided in a wall of a stationary structure **14**. The through holes **30** are provided in the coaxial annular flange **1a**. The screws **15** have heads **15a** fitted so that their shanks **15b** pass through the through holes **30** and are screwed into the tapped holes **14a**. Each of the through holes **30** comprises a distal segment **30a** followed by an enlarged proximal segment **30b**. The distal segment **30a** is cylindrical and the enlarged proximal segment **30b** is cylindrical about the same axis and adjacent to a corresponding one of the tapped holes **30**.

Regarding claim 2, the proximal segment **30b** has a shape, i.e., the same cylindrical shape recited in claim 1. The proximal segment **30b** is of a length greater than the length of the distal segment.

Regarding claims 5 and 15, the screw shank **15b**, comprises, adjacent to the head **15a** a smooth shank segment (see Figure 2) of diameter considerably smaller than the diameter of the distal segment **30a** and followed to a free end by a threaded segment (the threaded portion).

Regarding claims 6 and 16, the diameter of the smooth shank segment is less than or equal to 80% of the diameter of the distal segment.

Regarding claims 7 and 17, the proximal segment **30b** is of a length greater than or equal to 1.5 times the length of the distal segment.

Regarding claim 9, an elastomer damper material **31** is inserted in a space between the shank **15a** and the through hole **30** of the flange **1a**.

Regarding claim 10, Okudera et al. disclose, in Figures 1 and 4, a vacuum pump comprising a pump body **1**, a rotor **7**, an annular flange **1a**, through holes **30**, and screws **15**. The rotor **7** is rotatable in the pump body **1**. The annular flange **1a** is provided in the pump body **1**. The tapped holes **14a** are provided in a wall of a stationary structure **14**. The through holes **30** are provided in the coaxial annular flange **1a**. The screws **15** have heads **15a** fitted so that their shanks **15b** pass through the through holes **30** and are screwed into the tapped holes **14a**. Each of the through holes **30**

comprises a distal segment **30a** followed by an enlarged proximal segment **30b**. The distal segment **30a** is cylindrical and the enlarged proximal segment **30b** is cylindrical about the same axis and adjacent to a corresponding one of the tapped holes **30**.

Regarding claim 11, Okudera et al. disclose. in Figures 1 and 4, a faster system comprising a screw **15**, an annular flange **1a**, and a stationary structure **14**. The screw comprises a head **15a** and a shank **15b**. The flange **1a** comprises a through hole **30**. The through hole **30** comprises a distal segment **30a**, and a proximal segment **30b**. The stationary structure **14** has a hole **14a**. A cross-sectional area of the distal segment **30a** taken in a direction perpendicular to a central axis of the through hole **30** is smaller than that of the proximal segment. The proximal segment provided a gap. The proximal segment has an opening sized differently from an opening of the outermost opening of the hole **14a** in the stationary structure **14**.

Regarding claim 12, the proximal segment **30b** has an opening greater than an outermost opening of the hole **14a** in [the] stationary structure **14**.

Regarding claim 13, a distance measured in a radial direction of the through hole **30** between an inside wall of the proximal segment and an opposing outside surface of the screw shank when the screw is fully inserted in the through hole **30** is greater than a radius of the screw shank **15b**.

Regarding claim 14, the proximal segment of the through hole **30** is of a length greater than a total length of the distal segment of the through hole **30**.

Regarding claim 18, each of the proximal segments **30b** has an opening greater than an outermost opening of the hole **14a** in the stationary structure **14**.

Applicants cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Office Action at pages 7-10.

In response to the rejection under 35 U.S.C. § 102(e) over Okudera, Applicant notes that the effective U.S. filing date of Okudera is November 14, 2002. The instant application claims priority from a foreign application filed on August 29, 2002. Applicant is submitting herewith a certified English translation of the foreign application to overcome the rejection over Okudera. Accordingly, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection.

Claim Rejections - 35 U.S.C. § 103

1. Claims 5, 6 And 15-17 Over Potts (US 2,748,578) In View Of Allart et al. (US 5,220,854).

In rejecting claims 5, 6 and 15-17 over Potts (US 2,748,578) in view of Allart et al. (US 5,220,854), the grounds of rejection state:

> Regarding claims 5 and 15, Potts, as discussed, fails to disclose the screw shank comprises, adjacent to the head, a smooth shank segment of diameter considerably smaller than the diameter of the distal segment **A3** and followed to a free end by a threaded segment. Allart et al. teach, in Figure 1, a screw shank comprising, adjacent to a head, a smooth shank segment of diameter that is considerably smaller than the diameter of a distal segment of a through hole and the smooth shank is followed to a free end by a threaded segment to prevent from threading the shank all the way towards the head since such design will save manufacturing costs and time of manufacturing. Therefore, as taught by Allart et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a smooth shank segment, adjacent to the head, of diameter smaller than the diameter of the distal segment **A3** of Potts and the smooth shank is followed to a free end by a threaded segment to save manufacturing costs and time instead of threading the shank all the way up to the head of the screw.
>
> Regarding claims 6 and 16, given the modification, it would have been obvious matter of design choice to design the

> diameter of the smooth shank segment less than or equal to 80% of that of the distal segment since such clearance J, as taught by Allart et al. (Fig. 5), prevents the thread from being damaged. Therefore, as taught by Allart et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the smooth shank segment with a diameter less than or equal to 80% of that of the distal segment to prevent the thread from being damage while being inserted in the through hole.
>
> Regarding claim 17, Potts discloses the proximal segment **A4** having a length greater than or equal to 1.5 time a length of the distal segment **A3**.

Office Action at pages 10-12. Applicant disagrees.

Since claims 5 and 6 are dependent upon claim 1, and Allart fails to cure the deficient teachings of Potts with regard to claim 1, Applicant submits that such claims are patentable at least by virtue of their dependency. In particular, regarding claim 1, the grounds of the rejection again ignore the claimed feature that the proximal segment is adjacent to the corresponding tapped hole when fastened to the stationary structure, and reverse the locations of the distal and proximal segments in order to argue that Allart teaches the limitations of claims 5 and 6, which depend from claim 1. This interpretation is contrary to the clear language of the claim. In addition, claim 11 contains features that are similar to the features discussed above in conjunction with claim 1. Since claims 15-17 are dependent upon claim 11, and Allart fails to cure the deficient teachings of Potts with regard to claim 11, Applicant submits that such claims are patentable at least by virtue of their dependency. Therefore, Applicant requests the Examiner to reconsider and withdraw the rejection of claims 5-6 and 15-17 in view of Potts and Allart for at least these reasons.

2. Claim 8 Over Okudera et al. (US 6,824,349).

In rejecting claim 8 over Okudera et al. (US 6,824,349), the grounds of rejection state:

> Regarding claim 8, Okudera et al., as discussed, fail to disclose a washer interposed between the head and an adjacent outside face of the flange **1a**. Applicants are reminded that putting a washer in threaded connection is well known in the art to prevent the bolt from being loosen. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to interpose a washer between the head and the adjacent outside face of the flange to prevent the bolt from being loosen.

Office Action at page 12.

As noted above, Applicant is submitting herewith a certified English translation of the foreign priority application to overcome the rejection over Okudera. Accordingly, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection.

3. Claims 1, 3, 4, 9 And 11-17 Over Carlson (US 2,560,413) In View Of Weis (US 1,831,430).

In rejecting claims 1, 3, 4, 9 and 11-17 over Carlson (US 2,560,413) in view of Weis (US 1,831,430), the grounds of rejection state:

> Regarding claim 1, Carlson discloses, in Figures 1 and 4, a faster system comprising a screw **16**, a flange **A1** (see marked-up attachment), and a stationary structure **14**. The screw comprises a head and a shank. The flange **A1** comprises a through hole 22. The through hole 22 comprises a distal segment 28, and a proximal segment **A2**. The stationary structure **14** has tapped holes 26. However, the flange **A1** in Carlson is not annular any respect but appears square or does the flange include more than one through hole 22. Weis teaches, in Figure 4, a flange that is annular as part of a design consideration instead of being any other shape than square since rounding the flange to be annular provides for an increase in material toward an outside wall which will handle more stresses than merely being square. Therefore, as taught by Weis, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to make the flange annular to provide more material toward the outside wall to handle more stresses during operation of the connection. Further, Applicants are reminded that mere duplication of the essential working parts of a device involves only routine skill in the art. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide more than one through hole in the flange **A1** of Carlson so that the screws provide twice as much clamping force than using one through hole in the flange **A1**. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Regarding claim 3, the proximal segment **A2** includes a cylindrical proximal portion **A4** connected to the distal segment 28 by a circularly frustoconical distal portion **A3**.

Regarding claim 4, the frustoconical portion **A3** has a cone half-angle equal to about 60 degrees.

Regarding claim 9, Carlson discloses the system further comprises a material inserted in a space between the shank and the through hole. However, the material is not an elastomer damper (as seen by the cross-section). However, Carlson suggests, in column 4, lines 10-16, any material possessing qualities of flowing and conforming to the bores can be used). Thus, one can use rubber, an elastomer damper material, since rubber possesses qualities of flowing and conforming to bores when being compressed. Therefore, as taught by Carlson, it would have been obvious to one of ordinary skill in the art at the time the invention was made to choose rubber, an elastomer damper material, since rubber flows and conforms to bores when being compressed.

Regarding claim 11, Carlson discloses, in Figures 1 and 4, a faster system comprising a screw **16**, a flange **A1** (see marked-up attachment), and a stationary structure **14**. The screw comprises a head and a shank. The flange **A1** comprises a through hole 22. The through hole 22 comprises a distal segment 28, and a proximal segment **A2**. The stationary structure **14** has a hole 26. A cross-sectional area of the distal segment 28 taken in a direction perpendicular to a central axis of the through hole 22 is smaller than that of the proximal segment **A2**. The proximal segment **A2** provides a gap. The proximal segment **A2** has an opening sized differently from an outermost opening of the hole 26 in the stationary structure **14**. However, the flange **A1** in Carlson is not

annular in any respect but appears square. Weis teaches, in Figure 4, a flange that is annular as part of a design consideration instead of being any other shape than square since rounding the flange to be annular provides for an increase in material toward an outside wall which will handle more stresses than merely being square. Therefore, as taught by Weis, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the flange annular to provide more material toward the outside wall to handle more stresses during operation of the connection.

Regarding claim 12, the proximal segment **A2** has an opening greater than an outermost opening of the hole 26 in the stationary structure **14**.

Regarding claim 13, a distance measured in a radial direction of the through hole 22 between an inside wall of the proximal segment **A2** and an opposing outside surface of the screw shank when the screw is fully inserted in the through hole 22 is greater than a radius of the screw shank.

Regarding claim 15, the screw shank comprises, adjacent to the head, a smooth shank segment of diameter considerably smaller than the diameter of the distal segment 28 and followed to a free end by a threaded segment.

Regarding claim 16, the diameter of the smooth shank segment is less than or equal to 80% of that of the distal segment 28.

Regarding claims 14 and 17, Carlson, as modified, fails to disclose the proximal segment **A2** having a length greater than or equal to 1.5 times a length of the distal segment 28. Applicants are reminded that a change in size is generally recognized as being within the level of ordinary skill in the art. Therefore, it would have been an obvious matter of design choice to decrease the length, i.e., the depth, of the distal segment 28 so that the proximal segment will have a length greater than or equal to 1.5 times the length of the distal segment 28 since such a modification would have involved a mere change in the size of a component. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Office Action at pages 12-16.

Claim 1 recites, *inter alia*, "...so that, in the event of shear forces (20, 21) being applied in any lateral direction in a connection zone between the vacuum pump (1) and the stationary structure (3), the shank (19) of the screw is allowed to bend and the through hole (16) is allowed to be offset laterally (D) correspondingly relative to the associated corresponding tapped hole (15)."

Referring to Figures 1 and 4 of Carlson, the bearing base 14 and the bearing cap 12 are fitted together such that cap screws 16 are disposed in stepped bores 22 and 24 of the bearing cap 12 and the bearing base 14, respectively. *See* Carlson at col. 3, lines 49-71. The dowel bushing 32 is used as a rigid guide in order to provide alignment between the bearing cap 12 and bearing base 14 (*see* column 4, lines 56-58). The dowel bushing 32 is a one-piece member that links the bearing members 12 and 14. Thus, no lateral offset occurs, and the screw is not allowed to bend. In other words, the bushings are used to align the bores of the cap and the base to ensure that a cap screw can be screwed into the bores to connect the bearing cap 12 to the bearing base 14. Therefore, Carlson fails to teach the claimed feature that "the through hole (16) is allowed to be offset laterally (D) correspondingly relative to the associated corresponding tapped hole (15)." In fact, Carlson teaches the exact opposite, in that the bushing is used to maintain the alignment of the bores, not allow the holes to be laterally offset from each other.

Weis fails to cure the deficient teachings of Carlson with respect to claim 1. Specifically, Weis teaches a bearing body "a" and a bearing cap "b," each having bores "d" through which a bolt can be disposed to connect the bearing body "a" and the bearing cap "b." *See* Weis at lines 33-46. The bearing body "a" and the bearing cap "b" are provided with teeth "e" to ensure that

the bores "d" are centered to prevent both axial displacement and distortion of the parts. *See* lines Weis at lines 39-50. In other words, like Carlson, Weis teaches that the holes are prevented from being offset laterally relative to each other. Accordingly, Applicant submits that claim 1 is patentable for at least the foregoing reason and respectfully requests the Examiner to reconsider and withdraw the rejection of claim 1. Since claims 3, 4 and 9 depend upon claim 1, Applicant submits that such claims are patentable at least by virtue of their dependency.

With regard to claim 11, which recites, *inter alia*, "...wherein the proximal segment has an opening that is sized differently from an outermost opening of the hole in the stationary structure," Applicant submits that Carlson and Weis fail to teach at least this feature of claim 11. As shown in Figures 1 and 4 of Carlson, the stepped bore 22 of the bearing cap 12 is disposed in alignment with the stepped bore 24 of the bearing body 14. The Examiner alleges that the portion of the stepped bore 22 labeled A2 in the Examiner's marked-up version of Figure 4 of Carlson corresponds to the claimed proximal segment. However, portion A2 is the same size as the outermost opening of the hole 16 in the stationary structure, which the Examiner analogizes to the bearing body 14. In other words, Carlson teaches that the proximal segment of the through hole, which is the portion closest to the stationary portion to which the flange is to be attached, is the same size as the outermost opening of the hole in the stationary structure. Therefore, Carlson fails to teach that "the proximal segment has an opening that is sized differently from an outermost opening of the hole in the stationary structure."

Weis fails to cure the deficient teachings of Carlson with respect to claim 11. As noted above, Weis teaches that bores "d" of the bearing body "a" and bearing cap "b" are aligned such

that a bolt can be disposed therein. As shown in Figure 1 of Weis, the bores "d" are the same size throughout the entire length of bearing body "a" and bearing cap "b." Therefore, Applicant submits that claim 11 is patentable over the cited references for at least the foregoing reasons and respectfully requests the Examiner to reconsider and withdraw the rejection of claim 11.

Since claims 12-17 are dependent upon claim 11, Applicant submits that such claims are patentable at least by virtue of their dependency. In addition, with regard to claims 12-17, the grounds of rejection only *conclude* that the features contained in such claims are disclosed in Carlson, apparently relying on Fig. 4 of Carlson. However, Carlson does not disclose that the drawings are to scale and, therefore, the Examiner is taking away more information than is permitted. Indeed, proportionality of features in a drawing are not evidence of actual proportions when the drawings are not to scale. *See* Manual of Patenting Examining Procedure ("MPEP") § 2125.

With regard to claim 12, the reference fails to make any mention that a proximal segment has an opening that is greater than the outermost opening of the hole in the stationary structure.

With regard to claim 13, the reference fails to make any mention that a distance measured in a radial direction of the through hole between an inside wall of the proximal segment and an opposing outside surface of the screw shank when the screw is fully inserted in the through hole is greater than a radius of the screw shank.

With regard to claim 14, the reference fails to make any mention that the proximal segment of the through hole is of a length greater than a total length of the distal segment of the through hole.

With regard to claim 15, the reference fails to make any mention that the shank comprises, adjacent to the head, a smooth shank segment of a diameter that is substantially smaller than a diameter of the distal segment of the through hole, and that is followed to a free end by a threaded segment shaped to screw into the hole in the stationary structure.

With regard to claim 16, the reference fails to make any mention that the diameter of the smooth shank segment is less than or equal to 80% of the diameter of the distal segment of the through hole.

With regard to claim 17, the reference fails to make any mention that the proximal segment is of a length greater than or equal to 1.5 times a length of the distal segment.

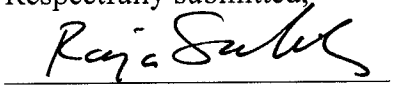
Accordingly, Applicant submits that claims 12-17 are patentable over the cited references for at least the foregoing reasons.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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